# AMENDMENTS TO THE CLAIMS

**1. (Currently Amended)** A multiplexer that ~~generates~~ is operable to generate multiplexed data by multiplexing packets of media data including image data and at least one of audio data and text data, comprising:

a media data obtainment unit operable to obtain the media data;

an analysis unit operable to analyze the media data obtained by the media data obtainment unit and to obtain playback start time information that indicates a playback start time of a sample that is a smallest access unit of the image data, audio data and text data included in the media data;

a packetization part determination unit operable to determine, based on the playback start time information obtained by the analysis unit, and in all the packets necessary for storing the media data, a packetization part of the media data ~~in a way~~such that playback start times of respective samples of the image data, audio data and text data that are included in the media data are made to be the same ~~or apporoximately the same~~;

a packet header part generation unit operable to generate a packet header part that holds a header of the media data on a basis of the packetization part ~~determined by the packetization part determination unit~~;

a packet data part generation unit operable to generate a packet data part that holds entity data of the media data on a basis of the packetization part ~~determined by the packetization part determination unit~~; and

a packetization unit operable to generate a packet by connecting the packet header part ~~generated by the packet header part generation unit~~ with the packet data part ~~generated by the packet data part generation unit~~.

**2. (Currently Amended)** The multiplexer according to Claim 1,

wherein the packetization part determination unit ~~makes~~ is further operable to make the playback start times of a sample of the audio data placed in ~~the~~a leading part of the packetization part and a sample of the text data the same ~~or approximately the same~~ as the playback start time of a sample of the image data placed in the leading part of the packetization part.

5

**3. (Currently Amended)** The multiplexer according to Claim 2,

wherein the packetization part determination unit ~~determines~~ is further operable to determine a sample of the audio data and a sample of the text data that are placed in the leading part of the packetization part as a sample whose playback start time is after the playback start time of a sample of the image data placed in the leading part of the packetization part and the earliest to the playback start time of a sample of the image data.

**4. (Currently Amended)** The multiplexer according to Claim 2,

wherein the packetization part determination unit ~~determines~~ is further operable to determine a sample of the audio data and a sample of the text data that are placed in the leading part of the packetization part as a sample whose playback start time is before the playback start time of a sample of the image data placed in the leading part of the packetization part and the earliest to the playback start time of a sample of the image data.

**5. (Currently Amended)** The multiplexer according to Claim 1,

wherein the image data is video data,

the analysis unit ~~further analyzes~~ is further operable to analyze the video data obtained by the media data obtainment unit and ~~obtains~~ to obtain intra frame information ~~in the case where~~ when the video data includes at least one sample including the intra frame information indicating that the at least one sample is an intra coded sample,

the packetization part determination unit ~~determines~~ is further operable to determine the media data as the packetization part based on the intra frame information and the playback start time information ~~in the case where~~ when the analysis unit obtains the intra frame information.

**6. (Currently Amended)** The multiplexer according to Claim 5,

wherein the packetization part determination unit ~~places~~ is further operable to place a sample of the video data including the intra frame information in ~~the~~ a leading

6

part of the packetization part.

**7. (Currently Amended)** The multiplexer according to Claim 6,

wherein the packetization part determination unit ~~makes~~ is further operable to make playback start time of ~~a~~ the sample of the video data including the intra frame information placed in the leading part of the packetization part the same ~~or approximately the same~~ as the playback start time of a sample of the audio data and a sample of the text data that are placed in the leading part of the packetization part.

**8. (Currently Amended)** The multiplexer according to Claim 1,

wherein the packet data part generation unit ~~generates~~ is further operable to generate ~~the~~ a packet data part for storing samples of the media data ~~items~~ included in the packetization part by interleaving ~~in a way~~ such that the playback start times of the samples are in an ascending order.

**9. (Currently Amended)** The multiplexer according to Claim 8,

wherein the packet data part generation unit ~~generates~~ is further operable to generate the packet data part for storing samples of the media data ~~items~~ included in the packetization part by interleaving ~~in a way~~ such that a previously set condition is satisfied.

**10. (Currently Amended)** A multiplexing method for generating multiplexed data by multiplexing packets of media data including image data and at least one of audio data and text data, comprising:

    ~~a media data obtainment step of~~ obtaining the media data;

    ~~an analyzing step of~~ obtaining ~~the~~ playback start time information indicating a playback start time of a sample that is ~~the~~ a smallest access unit of the image data, audio data and text data included in the media data by analyzing the media data obtained in ~~the media data obtainment step~~ said obtaining the media data;

    ~~a packetization part determination step of~~ determining, based on the playback start time information obtained in said obtaining playback start time information and in all the packets necessary for storing the media data, ~~the~~ a packetization part of the media data

7

~~making~~ such that playback start times of respective samples of the image data, audio data and text data that are included in the media data are made to be the same~~based on the playback start time information obtained in the analysis step~~;

~~a packet header part generation step of~~ generating ~~the~~ a packet header part that holds a header of the media data on a basis of the packetization part ~~determined in the packetization part determination step~~;

~~a packet data part generation step of~~ generating ~~the~~ a packet data part that holds entity data of the media data on a basis of the packetization part ~~determined in the packetization part determination step~~; and

~~a packetization step of~~ generating a packet by connecting the packet header part ~~generated in the packet header part generation step~~ to the packet data part ~~generated in the packet data part generation step~~.

**11. (Currently Amended)** The multiplexer according to Claim 10,

wherein, in ~~the packetization part determination step~~said determining, playback start times of a sample of the audio data and a sample of the text data that are placed in ~~the~~ a leading part of the packetization part ~~is~~are made to be the same ~~or approximately the same~~as the playback start time of a sample of the image data placed in the leading part of the packetization part.

**12. (Currently Amended)** The multiplexing method according to Claim 10,

wherein the image data is video data, ~~in the analysis step, further, the~~in said obtaining playback start time information intra frame information is obtained ~~in the case where~~when at least one sample including intra frame information indicating that the video data is an intra coded sample is included by analyzing the video data obtained in ~~the media data obtainment step~~said obtaining the media data, and

in ~~the packetization part determination step~~said determining,

the packetization part of the media data is determined based on the intra frame information and the playback start time information ~~in the case where~~when the intra frame information is obtained in ~~the analysis step~~said obtaining playback start time information.

8

**13. (Currently Amended)** The multiplexing method according to Claim 12,

wherein, ~~in the packetization part determination step~~ in said determining,

a sample of the video data including the intra frame information is placed in ~~the~~ a leading part of the packetization part.


**14. (Currently Amended)** The multiplexing method according to Claim 13,

wherein, ~~in the packetization part determination step~~ in said determining,

playback start times of a sample of the audio data and a sample of the text data that are placed in the leading part of the packetization part are made to be the same ~~or approximately the same~~ as a playback start time of a sample of the video data including the intra frame information placed in the leading part of the packetization part.


**15. (Currently Amended)** The multiplexing method according to Claim 10,

wherein, ~~in the packet data part generation step~~ in said generating a packet data part, ~~the~~ a packet data part for storing samples of the media data ~~items~~ included in the packetization part is generated by interleaving ~~in a way~~ such that playback start times of the samples are in an ascending order.


**16. (Currently Amended)** A computer program <u>recorded on a computer-readable recording medium</u> for a multiplexer that ~~generates~~ <u>is operable to generate</u> multiplexed data by multiplexing packets of media data including image data and at least one of audio data and text data, the program <u>for</u> causing a computer to execute ~~steps~~ <u>at least the following</u> in a multiplexing method comprising:

~~a media data obtainment step of~~ obtaining the media data;

~~an analysis step of~~ obtaining playback start time information indicating <u>a</u> playback start time of a sample that is a smallest access unit of the image data, audio data and text data included in the media data by analyzing the media data obtained in ~~the media data obtainment step~~ <u>said obtaining the media data</u>;

~~a packetization part determination step of~~ determining, based on the playback start time information obtained in ~~the analysis step~~ <u>said obtaining playback start time</u>

information and in all the packets necessary for storing the media data, a packetization part of the media data ~~in a way~~ such that playback start times of respective samples of the image data, audio data and text data that are included in the media data are made to be the same ~~or approximately the same~~;

~~a packet header part generation step of~~ generating a packet header part that holds a header of the media data on a basis of packetization part ~~determined in the packetization part determination step~~;

~~a packet data part generation step of~~ generating ~~the~~ a packet data part that holds entity data of the media data on a basis of the packetization part ~~determined in the packetization part determination step~~; and

~~a packetization step of~~ generating a packet by connecting the packet header part ~~generated in the packet header part generation step~~ and ~~a~~ the packet data part ~~generated in the packet data part generation step~~.


17. (Withdrawn - Currently Amended) A demultiplexer that ~~obtains~~ is operable to obtain multiplexed data where media data including image data and at least one of audio data and text data ~~are included~~ is multiplexed on a basis of a predetermined packetization part, comprising:

a multiplexed data obtainment unit operable to obtain the multiplexed data;

an analysis demultiplex unit operable to analyze the multiplexed data obtained by the multiplexed data obtainment unit, ~~demultiplexes~~ and operable to demultiplex a header part of ~~the~~ a packet from the multiplexed data and ~~obtains~~ to obtain the header part; and

a random access searching unit operable to search only a header of a sample of the image data placed in ~~the~~ a leading part of the packet header part demultiplexed by the analysis ~~demultiplexing~~ demultiplex unit and judges whether intra frame information indicating that the sample of the image data included in the packet is an intra coded sample or not at the time of executing random access that is the processing for changing a starting position of demultiplexing of the multiplexed data or starting demultiplexing in ~~the~~ a middle of the multiplexed data.